PROVIDENCE SEWAGE TREATMENT SYSTEM, Reservoir Avenue Pumping Station Reservoir and Pontiac Avenues Providence Providence County Rhode Island HAER NO. RI-20-E
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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD Mid-Atlantic Region Department of the Interior Philadelphia, Pennsylvania 19106

HISTORIC AMERICAN ENGINEERING RECORD PROVIDENCE SEWAGE TREATMENT SYSTEM: Reservoir Avenue Pumping Station

HAER NO. RI-20-E

LOCATION:

Reservoir and Pontiac Avenues, Providence, Providence County, Rhode

Island

UTM:19.297880.4628830 Quad: Providence, RI

DATE OF CONSTRUCTION:

1931

ENGINEER:

S. Frank Nolan

PRESENT OWNER:

Narragansett Bay Commission

44 Washington Street, Providence, RI

PRESENT USE:

Sewage Pumping Station

SIGNIFICANCE:

The Reservoir Avenue Pumping Station was built in 1931 to convey sewage from a low-lying and increasingly populated area of Providence up to a gravity line and thence to the main pumping station at Ernest Street. From there it was pumped to the city's Fields Point Plant for treatment. The Reservoir Avenue Pumping Station is thus historically and

functionally associated with

Providence's sewage treatment system. Its construction, like that of the earlier (1913) Washington Park pump station, illustrates the continued expansion of the system in response to the residential and industrial expansion of the city in the early

decades of the 20th century.

DESCRIPTION:

The Reservoir Avenue Sewage Pumping Station is situated on the south side of the intersection of Reservoir and Pontiac Avenues, very near the southern city limit, in an area of southwest Providence known as the "Reservoir Section" or "Triangle". Erected in 1931, the building consists of a poured concrete substructure containing wet and dry wells, and a hipped-roofed superstructure with red pressed brick exterior. Natural illumination is provided by narrow horizontal windows set high in the walls below soldier-arched heads. Metal doors are located in the east and north elevations.

The north door opens onto a small concrete platform above the wet well, which occupies about two-thirds of the substructure. Two manually-operated gates control the flow of sewage past bar screens (not in use) into two concrete channels. A pneumatic float system regulates the level of sewage within these channels. At a predetermined level, sensors cause one of the pumps to turn on automatically, to pump sewage 300-400 feet east (and raising it about 16 feet) to a gravity conduit in Rutherford Avenue. A manually-operated gate in the wall between the channels permits the flow to be confined to one channel or the other, if necessary for repairs or maintenance.

The east door provides access to the control room, in which the pump motors and controls are located. The control room has interior walls of yellow glazed brick. Steel bulkheads in the floor, inset with glass block, provide a small amount of natural illumination as well as access to the pumps.

HISTORICAL INFORMATION:

The Reservoir Avenue Pumping Station was built in 1931 under City Engineer S. Frank Nolan to facilitate the conveyance of sewage from a low-lying area of the city to the treatment plant at Fields Point. The station pumps sewage up to a gravity conduit in Rutherford Avenue, whence it flows to the South Providence interceptor and then to the main pumping station at Ernest Street. Authorization for construction of the pump station was obtained through a City Council resolution in April, 1931. The "triangle" it was intended to service lay immediately adjacent to the east, consisting of approximately 50 acres located between Reservoir Ave., Pontiac Ave., and what is now Route 10. This area, lying south of Mashpaug Pond, was included in Providence's reannexation of part of Cranston in 1868. Located at the extreme south edge of the city, the "triangle" was apparently not

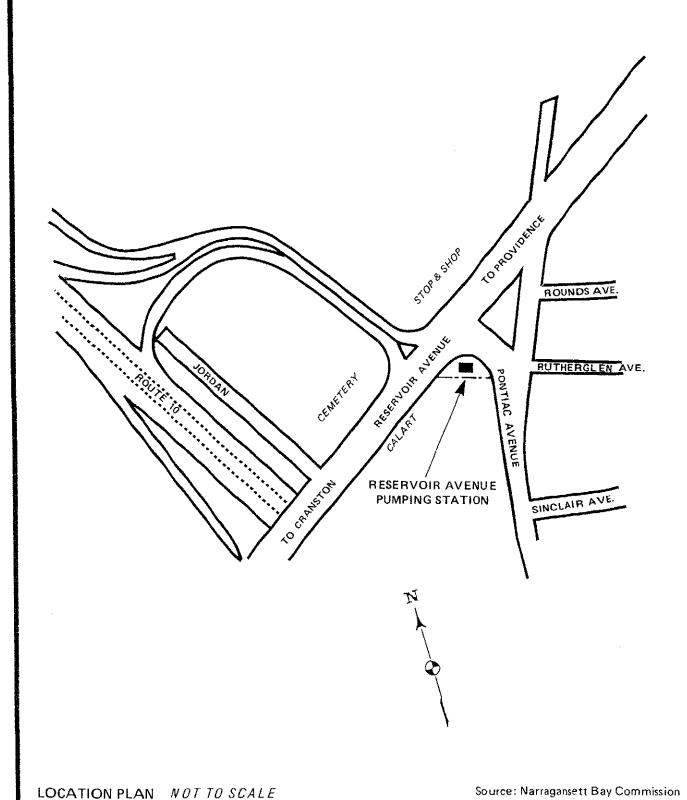
PROVIDENCE SEWAGE TREATMENT SYSTEM:
RESERVOIR AVENUE PUMPING STATION
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extensively populated until the 20th century. That it had been by the end of the 1920's is indicated by the decision to build a pump station to service the area.

BIBLIOGRAPHY:

Department of Public Works, Providence. Annual Report of 1931.

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Providence Sewage Treatment System: Reservoir Avenue Pumping Station HAER No. RI-20-E (Page 5) FORCE MAIN TO RUTHERGLEN AVENUE CHIMNEY TRAP DOOR IN FLOOR FOR PERSONNEL TRAP DOOR IN FLOOR FOR EQUIPMENT PUMP PUMP **PUMP MOTORS** WALL MOUNTED DESK FLOOR STAND BAR SCREEN FLOOR STANO SUBSTRUCTURE **SUPERSTRUCTURE** 10 FEET